PATENT Docket: CU-4970

Amendments to the Claims

The listing of claims presented below replaces all prior versions, and listings, of claims in the application.

Listing of claims:

1-10. (canceled)

 (currently amended) A liquid crystal display comprising a ferroelectric liquid crystal layer sandwiched between two substrates,

wherein an electrode and a photo alignment layer are each successively formed on opposite faces of the two substrates facing each other:

wherein a constituent material of the respective photo alignment layer is a photoreactive material which generates a photoreaction to give anisotropy to the photo alignment layer, the photoreaction of the constituent material of one respective photo alignment layer being a photo-dimerization reaction; and

the constituent material of the respective photo alignment layer has a different composition from each other with the ferroelectric liquid crystal layer sandwiched therebetween; and

wherein [[the]] <u>a</u> ferroelectric liquid crystal <u>in the ferroelectric liquid crystal layer</u> is a liquid crystal: having no smectic A phase in a phase series thereof, exhibiting mono-stability and undergoing half-V-shaped driving; and

further wherein the ferroelectric liquid crystal forms mono-domain alignment in the ferroelectric liquid crystal layer.

- 12. (previously presented) The liquid crystal display according to claim 11, wherein the photoreaction of the constituent material of the other respective photo alignment layer is a photo-dimerization reaction or a photo decomposition reaction.
- 13. (previously presented) The liquid crystal display according to claim 11, wherein the photoreactive material comprises a photo-dimerization-reactive compound having a radical-polymerizable functional group and dichroism that different absorptivities are exhibited depending on a polarization direction thereof.

- 14. (previously presented) The liquid crystal display according to claim 12, wherein the photoreactive material comprises a photo-dimerization-reactive compound having a radical-polymerizable functional group and dichroism that different absorptivities are exhibited depending on a polarization direction thereof.
- 15. (previously presented) The liquid crystal display according to claim 13, wherein the photo-dimerization-reactive compound is a dimerization-reactive polymer containing, as its side chain, any one of cinnamic acid ester, coumarin, and quinoline.
- 16. (previously presented) The liquid crystal display according to claim 14, wherein the photo-dimerization-reactive compound is a dimerization-reactive polymer containing, as its side chain, any one of cinnamic acid ester, coumarin, and quinoline.
- 17. (previously presented) The liquid crystal display according to claim 13, wherein the photo-dimerization-reactive compound is at least one selected from dimerization-reactive polymers represented by the following formulae:

in which A^1 and B^1 : 1,4-phenylene, a covalent single bond, pyridine-2,5-diyl, pyrimidine-2,5-diyl, 1,4-cyclohexylene or 1,3-dioxane-2,5-diyl;

Z¹¹ and Z¹²: —CH₂—CH₂—, —COO—, —OOC—, or a covalent single bond;

t: an integer of 0 to 4;

R12: a lower alkyl; and

n: an integer of 4 to 30,000.

18. (previously presented) The liquid crystal display according to claim 15, wherein the photo-dimerization-reactive compound is at least one selected from dimerization-reactive polymers represented by the following formulae:

$$R^{11}: -A^1 + Z^{11} - B^1 + Z^{12} -$$

in which A1 and B1: 1,4-phenylene, a covalent single bond, pyridine-2,5-diyl,

pyrimidine-2,5-diyl, 1,4-cyclohexylene or 1,3-dioxane-2,5-diyl;

Z¹¹ and Z¹²: —CH₂—CH₂—, —COO—, —OOC—, or a covalent single bond;

t: an integer of O to 4;

R12: a lower alkyl; and

n: an integer of 4 to 30,000.

19. - 22. (cancelled)

- 23. (previously presented) The liquid crystal display according to claim 11, wherein the ferroelectric liquid crystal is a liquid crystal which constitutes a single phase.
- 24. (previously presented) The liquid crystal display according to claim 12, wherein the ferroelectric liquid crystal is a liquid crystal which constitutes a single phase.
- 25. (previously presented) The liquid crystal display according to claim 11, wherein the liquid crystal display is driven by an active matrix system using a thin film transistor.
- (previously presented) The liquid crystal display according to claim 12, wherein the liquid crystal display is driven by an active matrix system using a thin film transistor.
- (previously presented) The liquid crystal display according to claim 11,
 wherein the liquid crystal display is displayed by a field sequential color system.
- (previously presented) The liquid crystal display according to claim 12,
 wherein the liquid crystal display is displayed by a field sequential color system.